## **NSF Dear Colleague Letter**

## Proposals for Cooperative Activities in Materials Sciences between the National Science Foundation and the European Commission

## Dear Colleague:

The basic properties of materials frequently define the capabilities, potential, reliability and limitations of technology. Improved materials and processes will play an increasing role in efforts to improve energy efficiency, promote environmental protection, develop information and communications systems, and provide modern and reliable transportation and civil infrastructure. Advances in materials research enable progress to be made across a broad range of scientific and engineering disciplines and technological areas with dramatic impacts on society.

Continued progress in materials research is increasingly dependent upon collaborative efforts among several different disciplines, as well as closer coordination among funding agencies and effective partnerships involving universities, industry, and national laboratories. In addition, because of the growing interdependence of the world's economies, partnerships are important not only at the national level but from an international point of view as well.

Over the last few years, the National Science Foundation has co-sponsored a series of international workshops designed to help stimulate enhanced collaboration among materials researchers and create networks linking individuals and centers in participating countries. The first workshop, held in May 1995, involved scientists and engineers from the US, Canada, and Mexico. Similar workshops followed to identify opportunities for collaboration among researchers from the US and the European Union (Belgium, 1996), collaborations among researchers from countries of the Americas (Brazil, 1998) and US-Asian Pacific collaborations (Hawaii, 1998). A workshop addressing US-African collaborations was held in August 2000 in the Republic of South Africa.

These workshops have identified possible areas for mutually beneficial collaborations and recommended that extensive use be made of electronic communication, information exchanges, and databases to promote and facilitate research collaborations and educational activities at the international level. Reports of the workshops can be found on the web page of the International Union of Materials Research Societies at http://www.iumrs.org. For general information about NSF programs, see http://www.nsf.gov.

In this context, and as part of the implementation of an Agreement for Scientific and Technological Cooperation Between the European Community and the Government of the United States of America, the National Science Foundation has entered into an implementing arrangement with a European Union "key action" that supports materials research. The arrangement will remain in place through 2002.

Collectively, the European Union (EU) R&D programs are known as the Framework Programme, a five-year appropriation to support a specified research agenda. The current Framework Programme (FP5) runs through 2002. Its key actions, Promoting Competitive and Sustainable Growth, supports materials research. More information about FP5 and the programs noted above, including possible third- country participation, can be found at http://www.cordis.lu/fp5.

US researchers may join multilateral European consortia as participants on European Commission (EC) proposals, but cannot receive EC support. The Framework Programme implements its research agenda through a scheduled series of calls for proposals; proposals are due three months later. An ongoing list of the EC calls for proposals can be found at www.cordis.lu. NSF will consider support for US participation in the following EU research domains: cross-cutting generic materials technologies; advanced functional materials; sustainable chemistry; expanding the limits and durability of structural materials; and support for research infrastructures in materials sciences. The annual budget for these EU research domains is approximately \$150 million. For more information about these EU research domains, see http://www.cordis.lu/fp5/src/t-3.htm.

NSF accepts proposals from US institutions in the context of the EC-US Science and Technology Agreement (see www.state.gov/www/regions/eur/eu/971205\_eu\_science\_agree.html) in three categories addressing interactions among US and European materials researchers, as indicated below.

- 1. Proposals by US institutions to support innovative collaborative research with scientists from the countries of the European Union and affiliated countries. NSF will support the US side of such collaborations. Support may be obtained through new proposals or through supplemental requests to existing NSF awards. Requests for supplementary funding should be submitted electronically using the Supplementary Funding Request Module in FastLane. Please note that the signed summary proposal budget form should be forwarded to NSF.
- 2. Proposals for the development of enhanced communication among European materials and US research centers and organizations. NSF is particularly interested in developing electronic networking among centers to facilitate cooperation and interaction among materials researchers in the US and the European Union. Networking should be able to link centers and institutions, enhance information exchanges, provide opportunities for integrating research and education, promote greater collaborative opportunities, and disseminate research results and educational materials. The budget may include equipment, operating costs and coordination costs for the network.
- 3. Proposals for joint organization and support of scientific seminars, conferences, symposia, and workshops.

Projects to be supported by NSF through this competition must have a clear relevance to materials phenomena, synthesis, characterization and/or processing. Projects not having this materials focus will be returned without review.

The proposal to NSF must be accompanied by two additional items which are to be entered into the "Supplementary Docs" FastLane form:

- 1. Information clearly identifying the counterpart EC proposal or funded project, including the project name, EC identification code, and a 1-page technical abstract.
- 2. A specific summary of the proposed interaction between the US and European partners, including the anticipated benefits of the interaction (limit: 2 pages).

Representatives from the Directorate for Mathematical and Physical Sciences, the Directorate for Engineering, and the Division of International Programs will manage the review of proposals on the US side. NSF suggests that investigators submit a brief (1-page) outline to one of the NSF staff contacts listed below in advance of the proposal deadline, to determine if the proposed scientific or technical focus is appropriate for NSF support.

Proposals must be submitted by 5:00 PM local time July 17, 2001. NSF will forward an information copy of the proposal to the European Commission. Counterpart proposals from European institutions to the EC will be reviewed through its normal procedures. Awards will be announced after a joint review of the fundable proposals by a steering committee made up of representatives from NSF and the EC.

Successful proposals will be designated as cooperative activities under the European Community-US Science and Technology Agreement.

Proposals to NSF must be submitted in accordance with the NSF Grant Proposal Guide (NSF 01-2, see http://www.nsf.gov/home/grants.htm). Proposals must be submitted via FastLane (the announcement number for these proposals is NSF 01-105)). For FastLane user support, call 1-800-673-6188 or e-mail fastlane@nsf.gov. The proposal must describe the US part of the cooperative activity in sufficient detail to enable reviewers to evaluate (1) its intellectual merit and (2) the broader impacts of the proposed activity. In addition to these review criteria, NSF will take into consideration the value added by the proposed international cooperation in materials research and the extent to which the proposal integrates research and education and promotes diversity. If you have further questions, or you are interested in other international cooperative activities including proposals for bilateral cooperation, please contact one of the NSF staff listed below.

W. Lance Haworth, Executive Officer, Division of Materials Research, FAX: (703) 292-9035 E-mail: lhaworth@nsf.gov

Robert M. Wellek, Deputy Director, Division of Chemical and Thermal Systems, FAX: (703) 292-9054, E-mail: rwellek@nsf.gov

Jeanne E. Hudson, Program Coordinator/Western Europe, Division of International Programs, FAX: (703) 292-9067, E-mail: jhudson@nsf.gov

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Grantees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

NSF welcomes proposals from all qualified scientists, engineers and educators. The Foundation strongly encourages women, minorities, and persons with disabilities to compete fully in its programs. In accordance with federal statutes, regulations, and NSF policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from NSF (unless otherwise specified in the eligibility requirements for a particular program).

Facilitation Awards for Scientists and Engineers with Disabilities (FASED) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects. See the program announcement or contact the program coordinator at (703) 292-6865.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Relay Service (FRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation regarding NSF programs, employment, or general information. TDD may be accessed at (703) 292-5090 or through FRS on 1-800-877-8339.

## PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the review process; to applicant institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne H. Plimpton, Reports Clearance Officer; Division of Administrative Services; National Science Foundation; Arlington, VA 22230.

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